

Nevada Division of Environmental Protection

AUTHORIZATION TO DISCHARGE

In compliance with Chapter 445A of the Nevada Revised Statutes,

City of Elko
1751 College Ave
Elko NV 89801

is authorized to irrigate with reclaimed water at

Ruby View Golf Course
City of Elko
Latitude 40° 51' 23" N, Longitude 115° 47' 20" W
T34N R55E S21

in accordance with the discharge limitations, monitoring requirements, and other conditions set forth in Parts I, II, and III hereof.

This permit shall become effective on: **Month XX, 200X.**

This permit and the authorization to discharge shall expire at midnight **Month XX, 200X.**

Signed this **XXxx** day of **Month**, 200X.

Robert J. Saunders
Staff Engineer
Bureau of Water Pollution Control



PART I

Introduction: Ruby View Golf Course is within the city limits of Elko, north of Interstate 80. 120 acres are irrigated with effluent supplied by the City of Elko Water Reclamation Facility (NEV20014). The effluent meets the Category B criteria of NAC 445A.276, with average and maximum fecal coliform concentrations of less than 23 and 240 cfu/100 ml, respectively. A 100 ft buffer zone is required. Since total nitrogen concentrations typically range from 15 to 20 mg/l, the application rate is limited by the nitrogen uptake of the plants. The use of well and spring water in addition to effluent allows the irrigation requirement to be met without exceeding the nitrogen load limit.

I.A EFFLUENT LIMITATIONS, MONITORING REQUIREMENTS AND CONDITIONS

- I.A.1 During the period beginning on the effective date of this permit, and lasting until the permit expires, the Permittee is authorized to use reclaimed water from City of Elko Water Reclamation Facility (NEV20014) at Ruby View Golf Course.
- I.A.2 Flow monitoring shall be recorded at the flow meter in the 6 in. supply line to Storage Reservoir 2.

The reuse shall be limited and monitored by the Permittee as specified below.

Table I.A.2

Parameter	Discharge Limitations		Monitoring Requirements
	30 Day Average	Monthly Total	
Application Rate	monitor & report (MGD) ⁽¹⁾	monitor & report (MG/month) ⁽²⁾	flow meter
Annual Application Volume	876 acre·ft/yr ⁽³⁾⁽⁴⁾		flow meter
Annual Nitrogen Load	210 lb N/acre·yr ⁽⁵⁾		calculation

(1) For the purpose of determining the fees required by NAC 445A.232, 0.5 MGD < 876 AFY < 1 MGD

(2) Monthly application rates in the Effluent Management Plan (EMP) shall be used as a guide.

(3) 110% of estimated irrigation requirement from the EMP.

(4) Report cumulative yearly total in each Discharge Monitoring Report (DMR).

(5) Annual nitrogen load limit includes effluent and fertilizer.

- I.A.3 Monitoring wells shall be constructed in accordance with "WTS-4: Monitoring Well Design Requirements", (NDEP, February 1997)

The monitoring wells shall be sampled in accordance with Table I.A.3.

Table I.A.3

Parameters	Groundwater Limitations	Monitoring Requirements	
		Measurement Frequency	Sample Type
Groundwater Elevation and Depth to Water, ft	m & r ⁽¹⁾	quarterly	measurement
Nitrate as N, mg/l	10 ⁽²⁾	quarterly	discrete
Total Kjeldahl Nitrogen as N, mg/l	m & r	quarterly	discrete
Total Nitrogen as N, mg/l	m & r	quarterly	discrete
Total Dissolved Solids, mg/l	m & r	quarterly	discrete
Chloride, mg/l	m & r	quarterly	discrete

1. Monitor and report.
2. See Part I.A.4.

- I.A.4 If the nitrate as N levels measured in the groundwater increase to 7.0 mg/l, as a result of reclaimed water irrigation, the Effluent Management Plan shall be revised to provide management practices which increase the nitrogen uptake by vegetation and/or adjust other nitrogen sources such as fertilizer application rates. If the nitrate as N levels increase to 9.0 mg/l as the result of reclaimed water irrigation, the Permittee shall submit a corrective plan of action which shall ensure that there is no further degradation of groundwater. If the nitrate as N levels increases to 10.0 mg/l as the result of reclaimed water usage, the reuse site will be in violation of the permit and formal enforcement actions will be initiated.

I.B EFFLUENT MANAGEMENT

- I.B.1 The irrigation storage pond(s), distribution system, and ancillary facilities shall be operated in accordance with the Effluent Management Plan (EMP). The EMP shall contain the information required to comply with this permit. It is recommended that the Permittee utilize "WTS-1B: General Criteria for Preparing an Effluent Management Plan (NDEP 2000), as a guidance to prepare the EMP.
- I.B.2 The Permittee shall provide a copy of a brief, but complete and understandable, document describing the possible hazards and proper hygiene of working with and around reclaimed water to all grounds keepers and other affected personnel. Copies shall be included in the EMP.
- I.B.3 If the annual application volume exceeds the limit in Table I.1, the Permittee shall prepare a report which includes an evaluation of the application rates in the EMP, an explanation of conditions (over seeding, reseeding, weather conditions, etc.) which led to the exceedance, and any planned changes the

Permittee deems necessary. The evaluation shall be submitted with the fourth quarter Discharge Monitoring Report (DMR).

I.B.4 The EMP shall detail the procedures for collecting monitoring samples required by this permit.

I.B.5 The total nitrogen applied (lbs/year) shall not be greater than the maximum yearly nitrogen application defined in the EMP.

If the Permittee determines that the annual nitrogen load limit of Table I.1 has been exceeded in any one year, the Permittee shall prepare a report which includes an evaluation of the nitrogen budget in the EMP, an explanation of conditions which led to the exceedance, and any planned changes the Permittee deems necessary. The evaluation shall be submitted with the fourth quarter DMR.

I.B.6 The reclaimed water irrigation system and storage ponds shall not cause objectionable odors on or off the site.

I.B.7 The irrigation system, storage pond(s), and ancillaries shall be constructed in accordance with plans approved by the Division. All plans must be approved by the Division prior to the start of construction. Any significant changes that result in the expansion of the areas of irrigation and/or change in the methods of reclaimed water application must be approved by the Division.

I.B.8 Irrigation areas and pond(s) shall be posted with signs clearly stating that reclaimed water is utilized and to avoid direct contact. Ancillary equipment used for reclaimed water irrigation shall be clearly marked to indicate use with reclaimed water.

I.B.9 Drinking water fountains located in areas subject to irrigation spray drift, shall be covered during irrigation to prevent reclaimed water from contacting the fountain. Additionally, places of food preparation shall be shielded from reclaimed water spray.

I.B.10 Irrigation of the golf course shall be performed in such a manner as to reduce standing water to a minimum and to prevent run off of reclaimed water from the site or into water courses.

I.B.11 Ponds shall be designed and managed to meet conditions listed in Part III.A.3.

- I.B.12 The Permittee shall provide documentation to the Division that notification has been made to the local water purveyor and the local health agency, of the Permittee's intent to use reclaimed water at this facility. The documentation shall describe the plan for complying with the cross-connection control requirements of the local water purveyor. This documentation shall be received prior to irrigation as detailed in the Schedule of Compliance.
- I.B.13 All terms and conditions stated herein shall not supersede the requirements of the Nevada Division of Water Resources.

I.C GENERAL CONDITIONS

- I.C.1 There shall be no discharge of substances that would cause a violation of water quality standards of the State of Nevada.
- I.C.2 The Permittee shall remit an annual review and services fee in accordance with NAC 445A.232 starting July 1, 2004 and every year thereafter until the permit is terminated.
- I.C.3 The Discharge Monitoring Reports (DMRs) must be signed by the facility's highest ranking officer. The first DMR submitted under this permit must include the written designation of the officer (required by Part III A.2) as the authorized representative to sign the DMRs. If the officer in responsible charge changes, a new designation letter must be submitted.

I.D SCHEDULE OF COMPLIANCE

- I.D.1 The Permittee shall implement and comply with the provisions of the following schedule of compliance after approval by the Administrator, including in said implementation and compliance, any additions or modifications which the Administrator may make in approving the schedule of compliance.
- a. The Permittee shall achieve compliance with the discharge limitations upon issuance of the permit.
 - b. The Permittee shall submit a plan for replacement of monitoring wells G2 and G4 by the 6 month anniversary of the effective date of this permit. The plan is subject to approval by the Division and shall include: well location(s), construction specifications, and schedule. Monitoring wells shall be constructed in accordance with "WTS-4: Monitoring Well Design Requirements" (NDEP, February 1997). Monitoring wells shall be installed and sampled prior to irrigation.

I.E MONITORING AND REPORTING

I.E.1 Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored reuse.

I.E.2 Reporting

a. Annual Report

- i. The fourth quarter report shall contain a plot of the date (x-axis versus concentration (y-axis) for each analyzed constituent in the monitoring wells. The plot shall include data from the preceding five years, if available.
- ii. The fourth quarter report shall demonstrate that the facility has maintained compliance with the annual application volume. If the annual application volume exceeds the limit of Table I.1, an evaluation shall be submitted with the fourth quarter report in accordance with the requirements of permit condition I.B.3.
- iii. The fourth quarter report shall demonstrate that the facility has maintained compliance with the annual nitrogen load limit. If the actual nitrogen load exceeds the limit of Table I.1, an evaluation shall be submitted with the fourth quarter report in accordance with the requirements of permit condition I.B.5.

b. Quarterly Report

Monitoring results obtained during the previous three (3) months shall be summarized for each month and reported quarterly on a Discharge Monitoring Report (DMR) Form received in this office no later than the 28th day of the month following the end of each quarter. The first report is MONTH 28, YEAR. An original signed copy of these, and all other reports required herein, shall be submitted to the State at the following address:

Diana Silsby, Compliance Coordinator
Bureau of Water Pollution Control
Nevada Division of Environmental Protection
333 W Nye Lane
Carson City NV 89706-0851

I.E.3 Definitions

- a. The "30 day average flow" means the total discharge volume during a month divided by the number of days of irrigation during the month.
- b. The "monthly total" means the volume of reclaimed water applied over the entire month.
- c. A "discrete" sample means any individual sample collected in less than 15 minutes.

I.E.4 Test Procedures

Test procedures for the analysis of pollutants shall conform to regulations (40 CFR, Part 136) published pursuant to Section 304(h) of the Clean Water Act, under which such procedures may be required unless other procedures are approved by the Division.

I.E.5 Recording the Results

For each measurement or sample taken pursuant to the requirements of this permit, the Permittee shall record and maintain the following information at the facility:

- a. the exact place, date, and time of sampling
- b. the dates the analyses were performed
- c. the person(s) who performed the analyses
- d. the analytical techniques or methods used, and
- e. the results of all required analyses.

I.E.6 Additional Monitoring by Permittee

If the Permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit, using approved analytical methods as specified above, the results of such monitoring shall be included in the calculation and reporting of the values required in the Discharge Monitoring Report Form. Such increased monitoring frequency shall also be indicated.

I.E.7 Records Retention

All records and information resulting from the monitoring activities required by this permit, including all records of analyses performed, calibration and maintenance of instrumentation, and recordings from continuous monitoring instrumentation, shall be retained for a minimum of three (3) years, or longer if required by the Administrator.

I.E.8 Modification of Monitoring Frequency and Sample Type

After considering monitoring data and ground water conditions, the Division, may for just cause, modify the monitoring frequency and/or sample type by issuing an order to the Permittee.

I.E.9 Laboratory Testing

All laboratory analysis conducted in accordance with this reuse permit must have detection at or below the permit limits. Additionally, all labs must be certified by the Nevada State Health Division for the parameters being analyzed.

PART II

II.A MANAGEMENT REQUIREMENTS

II.A.1 Change in Discharge

All discharges authorized herein shall be consistent with the terms and conditions of this permit. Any anticipated expansion of the reuse site(s) which will result in increased applications of reclaimed water for irrigation must be reported by submission of formal notice to the Division of Environmental Protection. This formal notification shall fully detail the nature of the expansion and all impacted areas. The Division will review this notice and determine whether a minor permit modification or major permit modification is warranted. Pursuant to NAC 445A.263, the permit may be modified to specify and limit any pollutants not previously limited.

II.A.2 Reuse Site Operation

The Permittee shall at all times maintain in good working order and efficiently operate all irrigation systems, distribution systems, treatment components, and pump stations installed or used by the Permittee to achieve compliance with the terms and conditions of this permit.

II.A.3 Adverse Impact

The permittee shall take all reasonable steps to minimize any adverse impact to receiving waters resulting from noncompliance with any permit limitation specified in this permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.

II.A.4 Noncompliance, Unauthorized Discharge, Bypass, and Upset

- a. Any diversion, bypass, spill, overflow or discharge of reclaimed water from the conveyance facilities, reuse site, or holding ponds under the control of the Permittee that results in reclaimed water leaving the reuse site(s) is

prohibited except as authorized by this permit. In the event the Permittee has knowledge that a diversion, bypass, spill, overflow or discharge not authorized by this permit is probable, the Permittee shall notify the Division immediately.

- b. The Permittee shall notify the Division within twenty four (24) hours of any diversion, bypass, spill, upset, overflow or release of reclaimed water that results in reclaimed water leaving the reuse site(s) (other than that which is authorized by the permit). A written report shall be submitted to the Administrator within five (5) days of diversion, bypass, spill, overflow, upset or discharge, detailing the entire incident including:
 - i. time and date of discharge
 - ii. exact location and estimated amount of discharge
 - iii. flow path and any bodies of water which the discharge reached
 - iv. the specific cause of the discharge, and
 - v. the preventive and corrective actions taken.

NOTE: releases of reclaimed water that remain on site need not be reported, however, measures shall be taken to prevent public contact with the release.

- c. An "upset" means an incident in which there is unintentional and temporary noncompliance with the permit limitations because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed facilities, inadequate facilities, lack of preventive maintenance, or careless or improper operation.
- d. In selecting the appropriate enforcement option, the Division shall consider whether or not the noncompliance was the result of an upset.
- e. The burden of proof is on the Permittee to establish that an upset occurred.

In order to establish that an upset occurred, the Permittee must provide, in addition to the information required under paragraph II.A.4.b. above, properly signed contemporaneous logs or other documentary evidence that:

- i. The reuse site was at the time being properly managed as required in paragraph II.A.2. above; and

- ii. All reasonable steps were taken to minimize adverse impacts as required by paragraph II.A.3. above.

II.A.5 Removed Substances

Solids, sludges, filter backwash, or other pollutants removed in the course of treatment shall be disposed of in such a manner as to prevent any pollution of waters of the state.

II.B RESPONSIBILITIES

II.B.1 Right of Entry

The Permittee shall allow the Administrator and/or his authorized representatives, upon the presentation of credentials:

- a. to enter upon the Permittee's reuse site(s) or in areas where any records are required to be kept under the terms and conditions of this permit; and
- b. at reasonable times, to have access to and copy any records required to be kept under the terms and conditions of this permit, to inspect any monitoring equipment or monitoring method required in this permit, to perform any necessary sampling to determine compliance with this permit, or to sample any discharge.

II.B.2 Transfer of Ownership or Control

In the event of any change in control or ownership of facilities from which the authorized reuse emanates, the Permittee shall notify the succeeding owner or controller of the existence of this permit, by letter, a copy of which shall be forwarded to the Administrator. All transfer of permits shall be approved by the Division.

II.B.3 Availability of Reports

Except for data determined to be confidential under NRS 445A.665, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the office of the Division. Reuse data shall not be considered confidential. Knowingly making any false statement on any such report may result in the imposition of criminal penalties as provided for in NRS 445A.710.

II.B.4 Furnishing False Information and Tampering with Monitoring Devices

Any person who knowingly makes any false statement, representation, or certification in any application, record, report, plan or other document filed or required to be maintained by the provisions of NRS 445A.300 to 445A.730,

inclusive, or by any permit, rule, regulation or order issued pursuant thereto, or who falsifies, tampers with or knowingly renders inaccurate any monitoring device or method required to be maintained under the provisions of NRS 445A.300 to 445A.730, inclusive, or by any permit, rule, regulation or order issued pursuant thereto, is guilty of a gross misdemeanor and shall be punished by a fine of not more than \$10,000 or by imprisonment. This penalty is in addition to any other penalties, civil or criminal, provided pursuant to NRS 445A.300 to 445A.730, inclusive.

II.B.5 Penalty for Violation of Permit Conditions

Nevada Revised Statutes NRS 445A.675 provides that any person who violates a permit condition is subject to administrative and judicial sanctions as outlined in NRS 445A.690 through 445A.705.

II.B.6 Permit Modification, Suspension, or Revocation

After notice and opportunity for a hearing, this permit may be modified, suspended, or revoked in whole or in part during its term for cause including, but not limited to, the following:

- a. violation of any terms or conditions of this permit
- b. obtaining this permit by misrepresentation or failure to disclose fully all relevant facts, or
- c. a change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.

II.B.7 Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the Permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable Federal, State or local laws, regulations, or ordinances.

II.B.8 Property Rights

The issuance of this permit does not convey any property rights, in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

II.B.9 Severability

The provisions of this permit are severable, and if any provision of this permit, or the application of any provisions of this permit to any circumstance, is held

invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

PART III

III.A.1 Reapplication

If the Permittee desires to continue to discharge, he shall reapply not later than 180 days before this permit expires on the application forms then in use. The Permittee shall submit the reapplication fee required by NAC 445A.232 with the application.

III.A.2 Signatures Required on Application and Reporting Forms

- a. All applications, reports, or information submitted to the Administrator shall be signed and certified by making the following certification.

"I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

- b. All applications, reports or other information submitted to the Administrator shall be signed by one of the following:
- i. A principal executive officer of the corporation (of at least the level of vice president) or his authorized representative who is responsible for the overall operation of the facility from which the discharge described in the application or reporting form originates; or
 - ii. A general partner of the partnership; or
 - iii. The proprietor of the sole proprietorship; or
 - iv. A principal executive officer, ranking elected official or other authorized employee of the municipal, state or other public facility.

c. **Duly Authorized Representative**

All Discharge Monitoring Reports and any other information required by this permit or requested by the Administrator shall be signed by a person described in paragraph (a) of this section, or by a duly authorized representative of that person. A person is a duly authorized representative only if:

- i. The authorization is made in writing by a person described in paragraph (a) of this section

- ii. The authorization specifies either an individual or a position having responsibility for environmental matters for the company, and
 - iii. The authorization is submitted to the Division.
- d. **Changes to Authorization.** If an authorization under paragraph c. of this section is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph b. of this section must be submitted to the Administrator prior to or together with any reports, information, or applications to be signed by an authorized representative.

III.A.3. **Holding Pond Conditions**

If any wastewater from the Permittee's facility is placed in ponds, such ponds shall be located and constructed so as to:

- a. contain with no discharge the once-in-twenty-five year 24 hour storm at said location
- b. withstand with no discharge the once-in-one-hundred year flood of said location, and
- c. prevent escape of wastewater by leakage other than as authorized by this permit.